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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/733,748 | 12/11/2003 | Brad Bivens | 1505800-050745 | 8409 |

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| EXAMINER |
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FASTOVSKY, LEONID M

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| ART UNIT | PAPER NUMBER |
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3742

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/733,748

Applicant(s)

BIVENS ET AL.

Examiner

Leonid M. Fastovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-10 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wengler in view of Higgins.

Wengler discloses a heater assembly (Fig. 1-3) comprising a first and second flexible layers 24 and 33 of the diaphragm 10, at least one flexible electric heating element 40 positioned between the first and second layers and forming first, second and third heating zones 44, 45 and 46, and wherein the flexible heating element 40 provides non-uniform heating as desired (col. 3, lines 47-63) and comprises bundled resistive wires knitted into a desired form (Fig. 3).

As for claims 4-5 and 8-9, Wengler discloses the first, second and third heating zones that are concentric circles and have different watt density and the flexible heating elements comprises three heating elements.

However, Wengler does not disclose the electric heating elements connected in series and a fourth heating zone.

Higgins discloses a flexible heating element comprises two heating elements 16 and 18 electrically connected in series, have concentric heating zones, and the heating element 18 inherently has a higher watt density than the element 16, and a third heating element

20 with a third heating zone and a fourth heating element 22 with a fourth heating zone (Fig. 1-2). It would have been obvious to one having ordinary skill in the art to modify Wengler's invention to include the electric heating elements connected in series and the fourth heating zone as taught by Higgins in order to generate variety of non-uniform heating zones as required by the user.

3. Claims 11 – 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wengler in view of Higgins and further in view of Lowery et al (3,875,373).

Wengler in view of Higgins discloses substantially the claimed invention, but does not disclose a silicon rubber and a thermal insulating layer. Lowery discloses a vacuum heated pad 10 comprising a first flexible layer - resilient body 13 made of silicone (col. 2, lines 59-69), a second flexible layer 16, a heating element 15 positioned between the first and second layers and an inherently thermal insulator layer 9, the layer 9 positioned adjacent to the second layer 33 and comprising woven fiberglass (col. 3, lines 1-12). It would have been obvious to one having ordinary skill in the art to modify the invention of Wengler in view of Higgins to use a thermal insulation layer to more efficiently use the heater assembly and silicon for the second layer and the thermal layer as taught by Lowery as one of the commonly used materials in the art in order to enhance durability of the heater.

Allowable Subject Matter

4. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Response to Arguments

6. Applicant's arguments with respect to claims 1-5, 8-13, 15 and 17-20 have been considered but are not persuasive. It would have been obvious to one having ordinary

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skill in the art to modify the invention of Wengler in view of Higgins to use a thermal insulation layer to more efficiently use the heater assembly and silicon for the second layer and the thermal layer as taught by Lowery as one of the commonly used materials in the art in order to enhance durability of the heater.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 571-272-4778. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leonid M Fastovsky
Examiner
Art Unit 3742

lmf

4/22/06



ROBIN EVANS
SUPERVISORY PATENT EXAMINER

4/28/06